



Gendered Commutes in Ankara: Women's Experiences, Strategies and Implications for the Design of Public Transport

08 . 2021

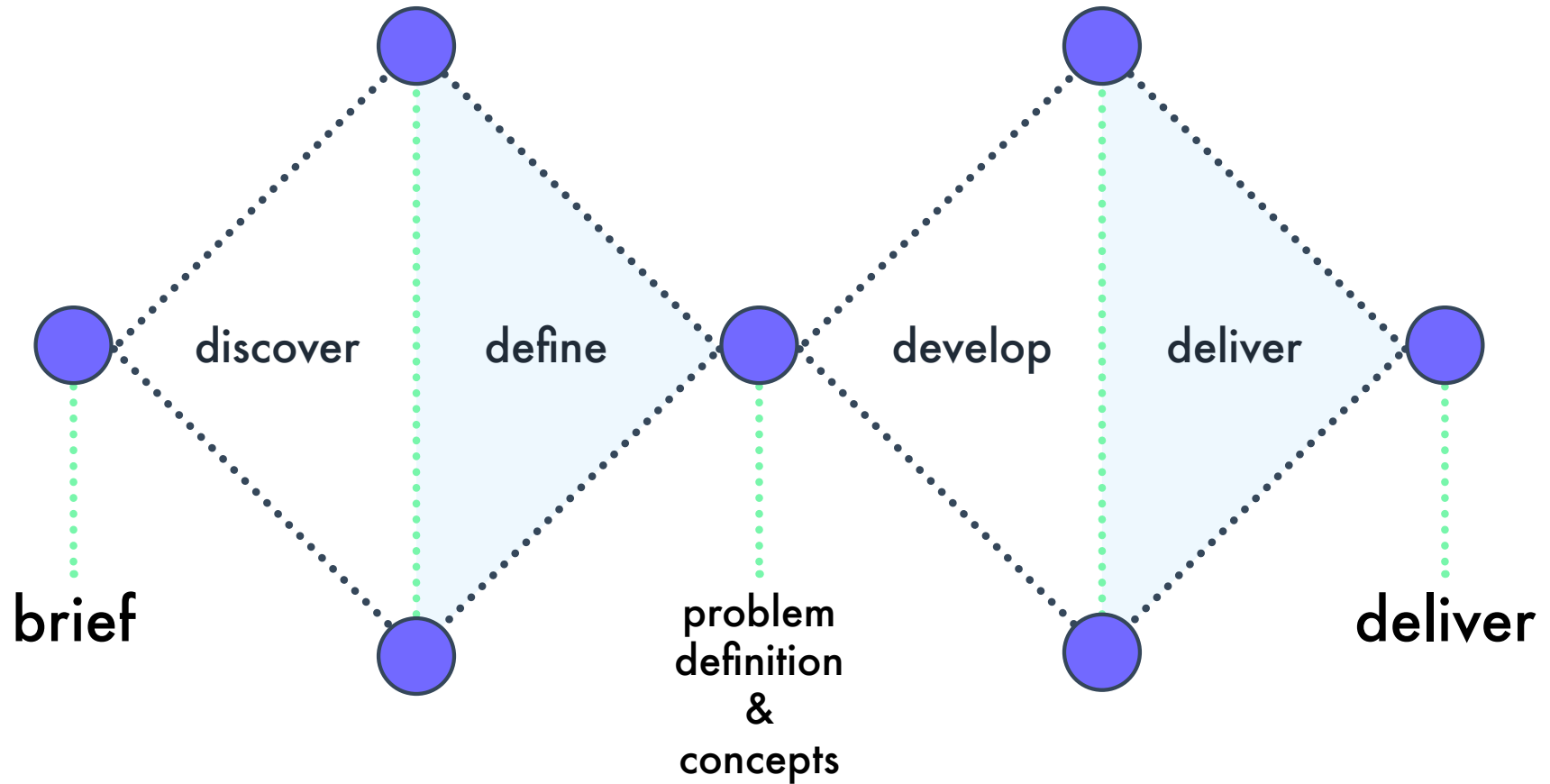


MIDDLE EAST TECHNICAL UNIVERSITY

cansu bezmez



design methodology



Double Diamond Design Methodology / Design Council

<https://www.designcouncil.org.uk/news-opinion/what-framework-innovation-design-councils-evolved-double-diamond>

brief

In the light of research findings, how can we make the interior of public transport safer for women with design from a feminist perspective?

problem definition

In the light of research findings, how can we make the interior of public transport safer for women with design from a feminist perspective?



How can be the pessanger experience improved?

1

How can be 'the unknown' defined in public transport?

2

How can be the field of vision improved in public transport?

3

How can be the personal space defined in public transport?

0

mental experience

“ ... insan hem bedenen yoruluyorsun zaten ama beynen de yoruluyorsun otobüse bindiğin zaman ya da dolmuşa bindiğin zaman. Acaba bir şeye uğrayacak mıyım, acaba bugün beni tacize mi uğrayacağım, acaba hırsızlık yaşayacak mıyım, acaba şu olacak mı bu olacak mı gibi bir düşüncen olmaz. Tek kişilik yerlere oturduğun zaman daha böyle şeyli olursun huzurlu ...”

How can be the anxiety reduced in public transport?

problem definition

1

physical contact

"... Yani, iyilikle de olsa hani bir erkeğin bir omzu bir kolu bir şeyi değse ben çok huzursuz, rahatsız oluyorum yani. Yani kötü niyetle yapan da oluyor hani benim başıma gelmedi ama yani duyuyoruz, görüyoruz hani insanlardan ..."

"... Ya dirseğime mesela ben dirseğimi dayamışım tutunacak yere, o da hani orayı tutuyor gibi yapıyor o sırada dirseğimi okşuyor mesela ..."

discover

physical contact

'Yanlışlıkla' dokunma ile okşama arasında çeşitli biçimlerde deneyimleniyor.

Oturma planı ve koltuk tasarımları riskleri arttırabiliyor.

Yan yana otururken erkeğin bacaklarını iki yana açarak veya yana kayan kadına doğru yaklaşmaya devam ederek kadının kişisel alanını ihlal etmesi, elle veya bacakla temas

Aracın fazla görünmeyen oturma alanlarında buna güvenerek erkeğin kadına temas etmesi veya ısrarla flört etmesi

Kadın otururken erkek yanında ayakta dururken erkeğin kadına yaklaşarak kadının kişisel alanını ihlal etmesi, vücuduyla veya koltuğa tutunduğu eliyle kadına dokunması

1

norms

“... Genç kızlar mesela otobüse biniyorlar, arkadan yanaşmalar oluyor, bilmem bir şeyler oluyor bilmem ne oluyor, mesela ben gördüğüm zaman kıza diyorum ki gel kızım yanıma gel, kızı yanıma oturtuyorum. Onunla karşıdaki kişiyle tartışmaya girmiyorum ama çocuğu yanıma çekiyorum, o hiç olmazsa yaptığı terbiyesizliğe hissediyor yani ...”

“... *bilmem bir şeyler oluyor bilmem ne oluyor ...*”

**How can be
'the unknown'
defined in public
transport?**

problem definition

1

physical contact

How can be 'the unknown' defined in public transport?

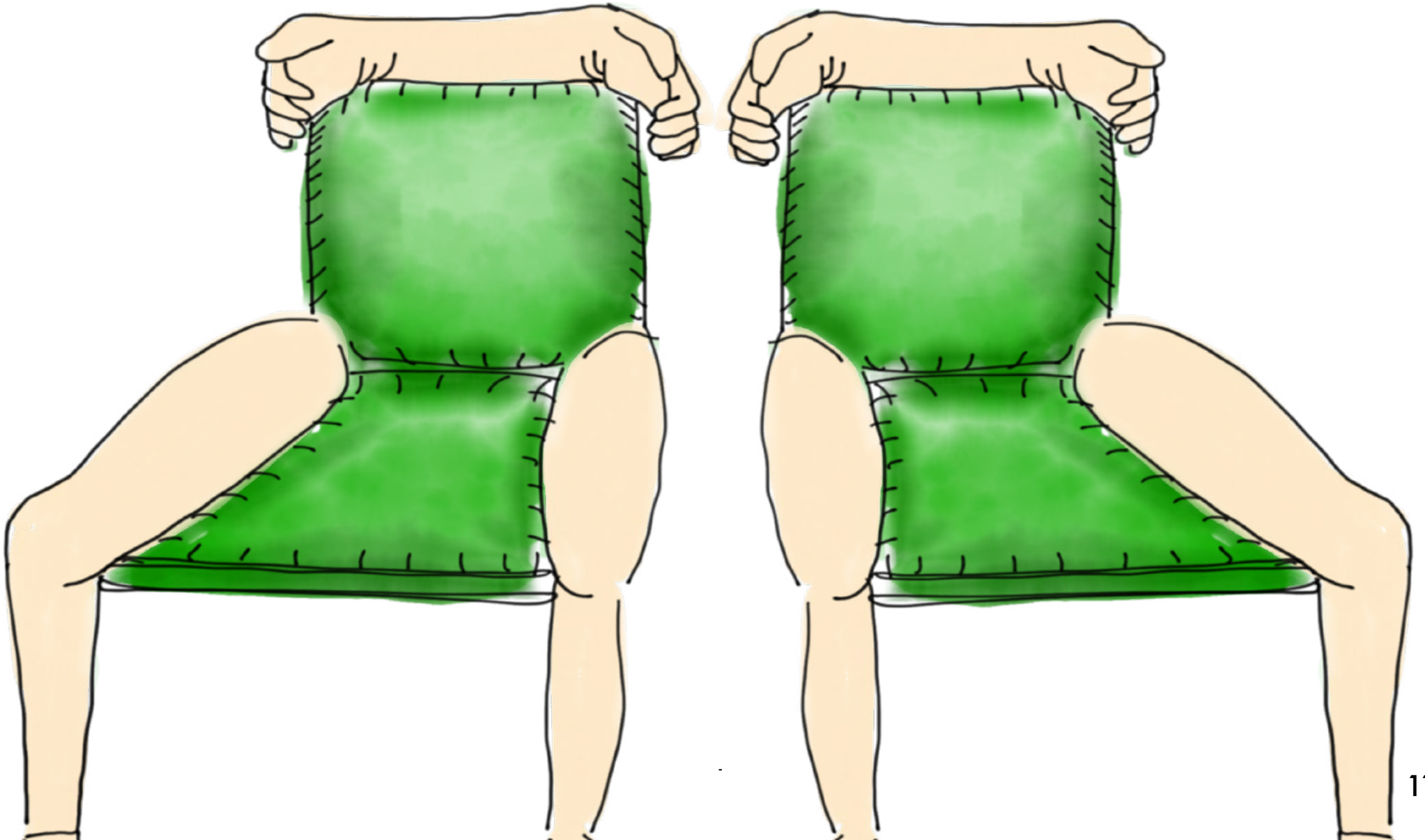
It is focused on the inconvenient physical experiences in the public transport and tried to define these experiences. It is tried to visualise in a way that individuals may have a better understanding about these 'unknown and undefined experiences'.

It is aimed to provoke people to think about these experiences and create a dialog in order to rethink and criticize about their own experiences.

The seating design portrays the inconvenient physical experiences such as touching, inappropriate seating in public transport. It can be used as a textile pattern in order to create a public awareness and create a dialog between the individuals and be aware about these experiences.

speculative idea

How can be 'the unknown' defined in public transport?





physical contact

The seating design portrays the inconvenient physical experiences such as touching, inappropriate seating in public transport. It can be used as a textile pattern in order to create a public awareness and create a dialog between the individuals and be aware about these experiences.

field of vision

“... şey çok rahatsız ediyor beni, hani koltuklar böyle şey ya karşılıklı duruyor ya karşıdakinin suratına bakmak zorundaymışsın gibi bir his uyandırıyor. O yönü çok itici, yani ayakkabıları inceliyorum bu sefer, artık suratına bakıp insanları irite etmemek için, kendime ayakkabı modeli beğeniyorum ...”

“... arka arkaya olmak biraz daha rahat hissettiriyor, yani en azından önüme bakabiliyorum ya da yan taraftan camdan dışarıyı seyredebiliyorum. Bir insanla direkt yüz yüze temasta olmak zorunda kalmıyorum ...”

field of vision

Bakışların araç içinde nereye yönlendirildiği, yeterince görünür olmayan izole alanlar, ayna ve kameralar, kadınların istemediği ve kaçamadığı etkileşimleri mümkün kılabilir.

Karşılıklı otururken kadınların göz göze gelmekten kaçamamaktan rahatsızlık duyması; göz göze geldiği erkeğin, kadının kendisine bakıyor olduğunu düşünerek bu durumu flörte çevirmesinden endişe duyması

Metroda karşılıklı oturma planında koridorda yukarıdan tutunarak ayakta bekleyen yolcuların, kendilerini fazla görünür ve 'seyredilmeye açık' hissetmesi

Metroda pencereden dışarıyı seyretememenin istenmeyen göz temaslarına yol açması

Kadın otururken erkek yanında ayakta dururken kadınların, görüş hizasının yanında ayakta duran yolcunun bel ve kalça hizasında kalmaması için yüksek (tekerlek üstüne denk gelen) koltukları tercih etmesi

mental experience

*"... çünkü izlemek istiyorum
bir şeyi ve bunun otobüsün
içi olmasını istemiyorum
ama eğer cam kenarında
değilsem hemen yanındaki
koltuktaysam ben oraya
bakarken yanımdaki insan
da oraya baksa da sanki
ona bakıyorum, bakmazsa
daha bile kötü ben oraya
bakıyorum, o buraya
bakıyor ve sanki yanlış anla,
genelde gözümü kaçıırım
öyle bir durumda rahatsız
ettirmemek için belki de ben
rahatsız oluyorumdur aslında
bilmiyorum ama bir rahatsızlık
olduğunu hissediyorum o
ortamda ..."*

**How can be
the *field of vision*
improved in
public transport?**

problem definition

2

field of vision

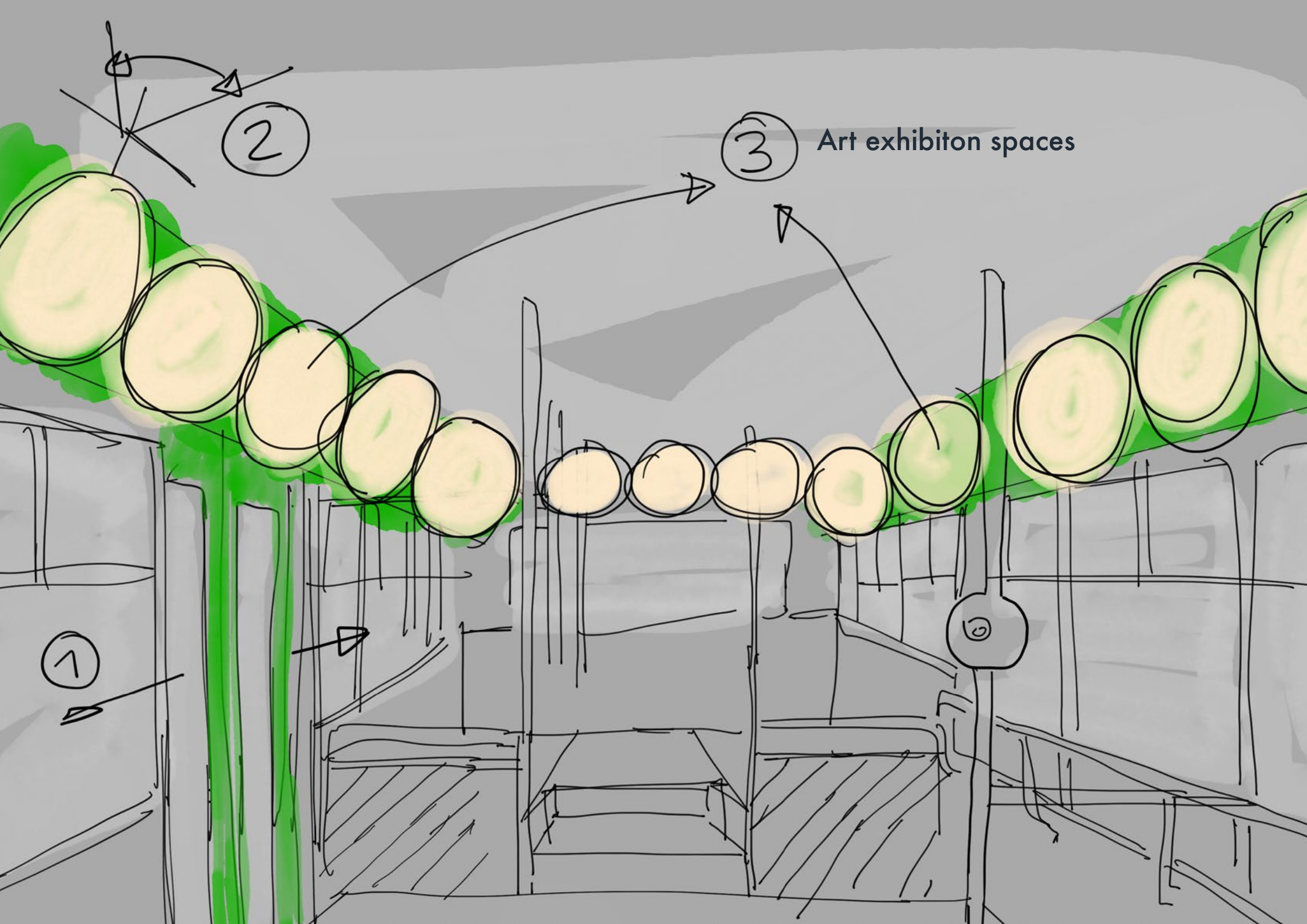
How can be the field of vision improved in public transport?

It is focused on improving the field of vision in order to create a space for individuals to look or focus at without feeling any feelings related with anxiety in the public transport.

Accordingly, safe spaces for viewing explored. The upper corners of the transport is taken as a determined space. It is thought that this space can be used as a potentially signages for art exhibition space in collaboration with artists and municipality in order to allow passenger an exhibiton or a museum experience.

Everytime the transportation vehicle opens up its doors (1), the art signages rotate (3) and be captured (2) by different passangers. In that way, the design creates a dynamic field of vision for passangers.

idea

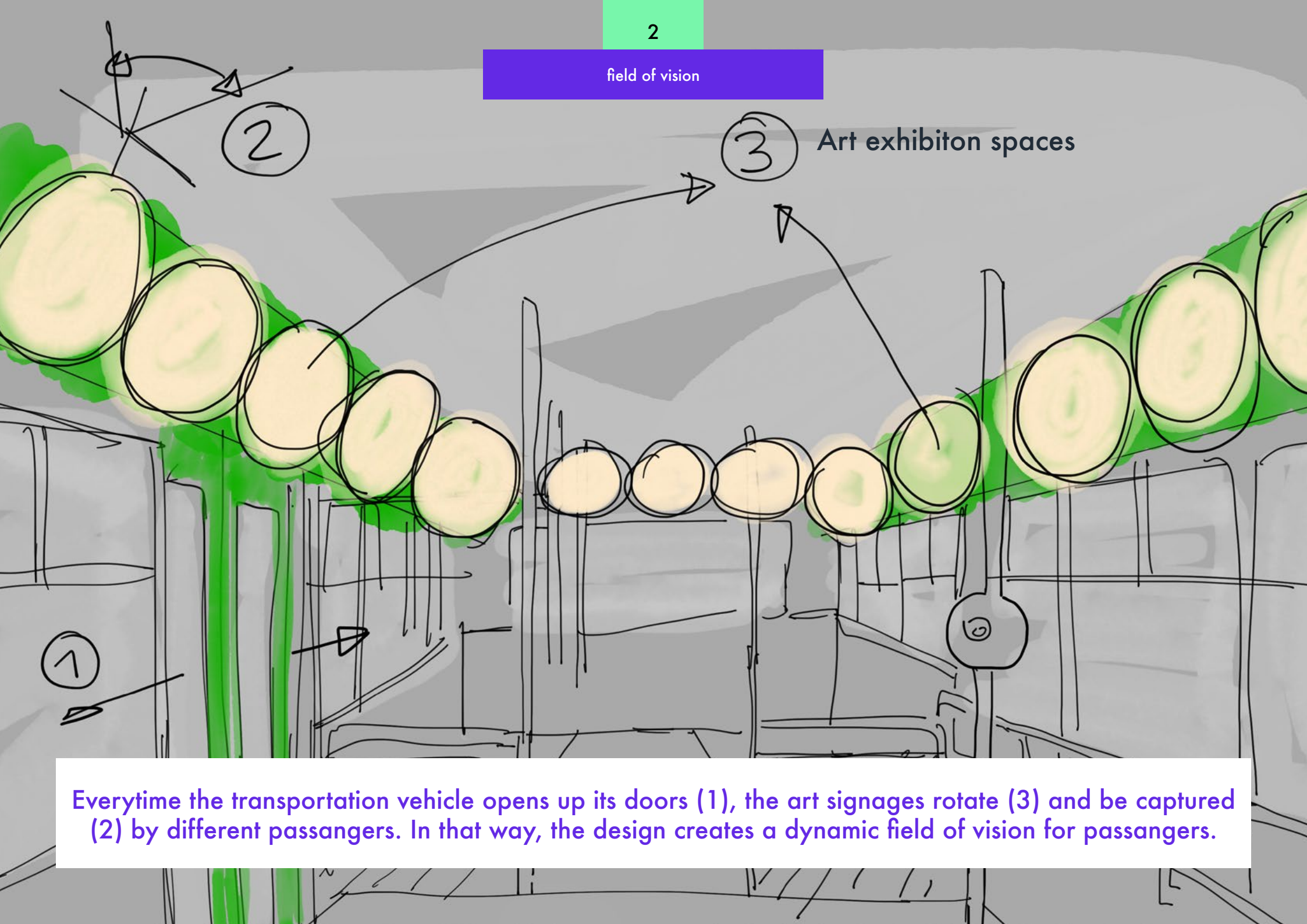


2

3

Art exhibiton spaces

1



Everytime the transportation vehicle opens up its doors (1), the art signages rotate (3) and be captured (2) by different passangers. In that way, the design creates a dynamic field of vision for passangers.

3

personal space

“... Ben mesela şöyle cam kenarına doğru gidiyorum o geliyor, cam kenarına doğru gidiyorum o geliyor eliyle. Ondan sonra da diyor ki sığmıyorum diyor, nasıl sığmıyorsun geliyorsun işte, üstüme üstüme geliyorsun. Bunu söylediğin zaman tabii onlar da şey veriyor. Bir susuyorsun, iki susuyorsun, üçüncüye patlıyorsun söylüyorsun.

... durakta beklerken amca sürekli dibimde, geliyor benimle, yani hani herkes aralıklı bekliyor amca neredeyse şuramda yapışık geliyor hani ben ilerledikçe ilerliyor falan. Hani zaten bir işkillendim mesela, sonra bindim ikili koltuğa mahsus hani koridor tarafına oturup yanımı boş bıraktım ki gelip yanıma oturmasın diye. Bekliyor, yani yanımda, insanlar birikiyor arkasında, benim orada bekliyor. Mahsus hani görmezden falan gelip işte kulağıma müzik taktım, artık insanlar birikince mecburen gitti, gibi mesela ...”

**How can be
the personal
space defined
in public
transport?**

define

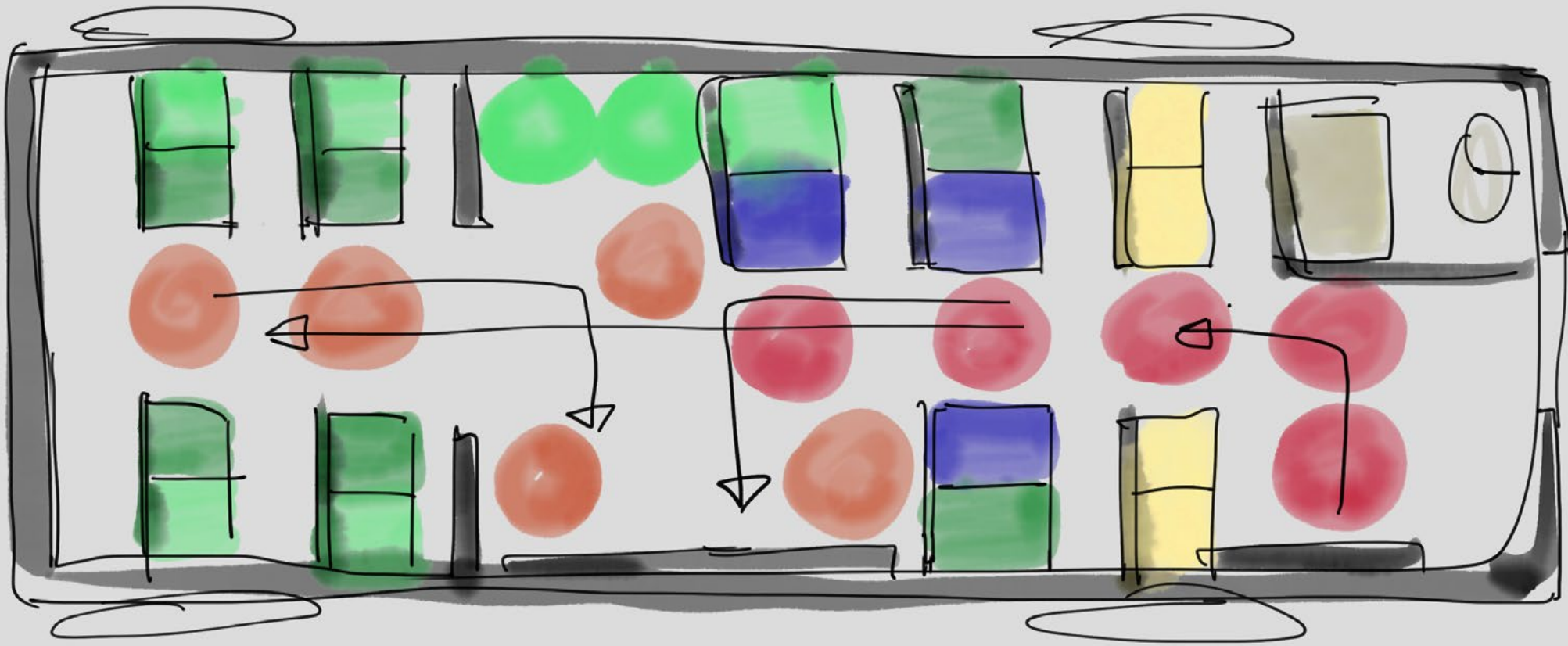
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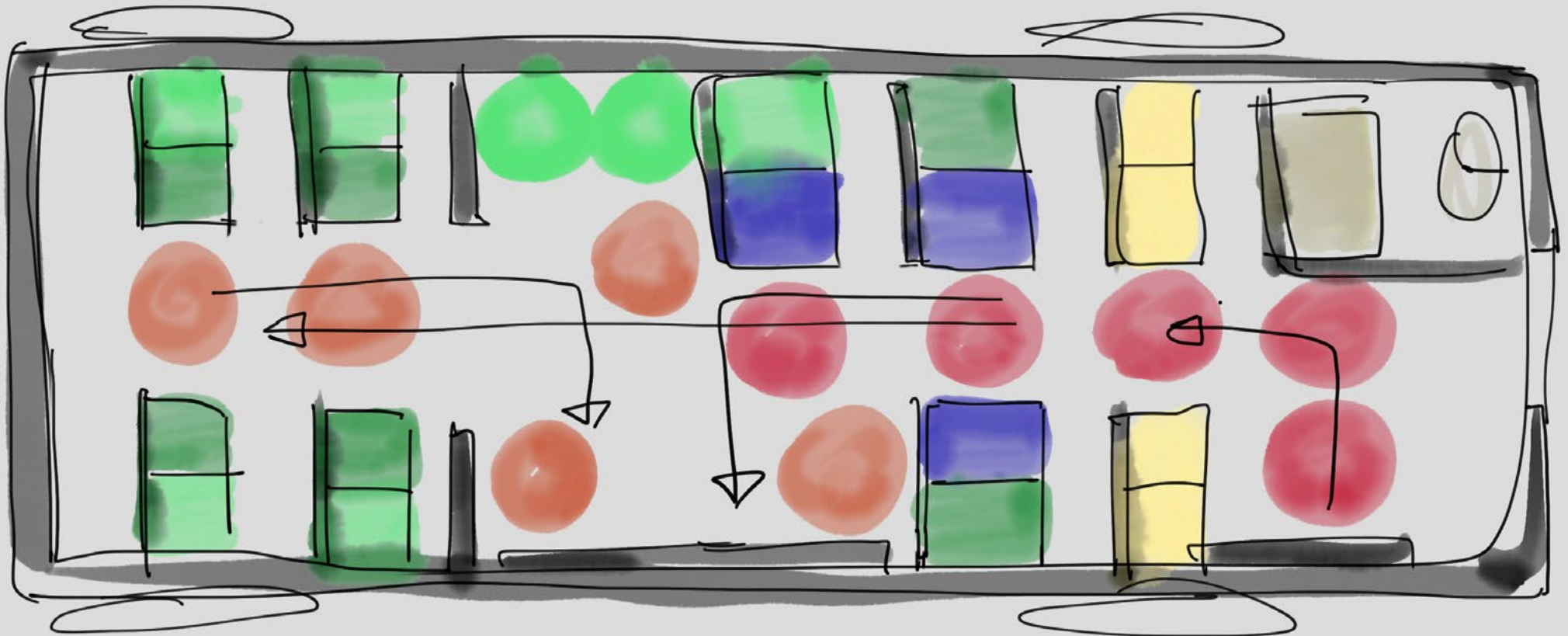
personal space

How can be the personal space defined in public transport?

The prior seating or standing spaces can be determined with visual coding. Therefore, when the passenger feels that her / his personal space is violated, it can help to define the situation and create a directed dialog for the layout priorities for warning individuals.

idea





The prior seating or standing spaces can be determined with visual coding. Therefore, when the passenger feels that her / his personal space is violated, it can help to define the situation and create a directed dialog for the layout priorities for warning individuals.

08 . 2021

cansu bezmez



PUBLIC TRANSPORT & GENDER-SENSITIVE DESIGN

MEHTAP OKUTAN

Problem (Re)definition & Approach

Defining the problem

User experience in public transport varies according to the gender. In these vehicles, with the opportunity given by the cultural and social structure, some behaviors exhibited by men are in the nature of harassment against women. For this reason, public transport has turned into a more risky and problematic area for women.

Approach & Process



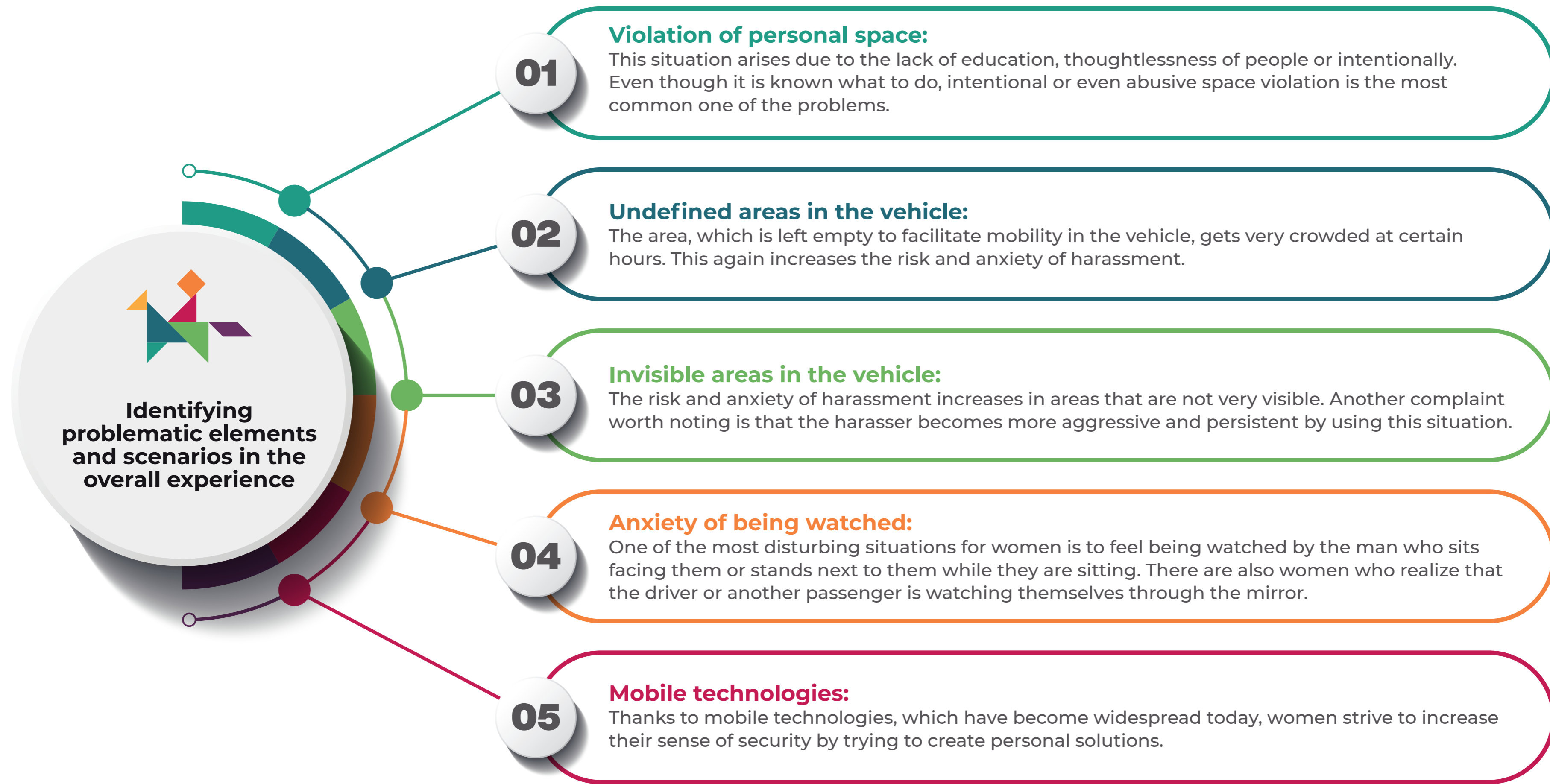
Identifying problematic elements and scenarios in the overall experience



Deconstructing the structure to transform or neutralize problematic elements



Reconstructing the structure to create a new and safe reality for women



Identifying
problematic elements
and scenarios in the
overall experience

01

Violation of personal space:

This situation arises due to the lack of education, thoughtlessness of people or intentionally. Even though it is known what to do, intentional or even abusive space violation is the most common one of the problems.

02

Undefined areas in the vehicle:

The area, which is left empty to facilitate mobility in the vehicle, gets very crowded at certain hours. This again increases the risk and anxiety of harassment.

03

Invisible areas in the vehicle:

The risk and anxiety of harassment increases in areas that are not very visible. Another complaint worth noting is that the harasser becomes more aggressive and persistent by using this situation.

04

Anxiety of being watched:

One of the most disturbing situations for women is to feel being watched by the man who sits facing them or stands next to them while they are sitting. There are also women who realize that the driver or another passenger is watching themselves through the mirror.

05

Mobile technologies:

Thanks to mobile technologies, which have become widespread today, women strive to increase their sense of security by trying to create personal solutions.



Deconstructing the structure to transform or neutralize problematic elements

1. Personal Space

It is possible to reconsider the seating units regarding the violation of personal space.

One of the most noted problems is that men disturb the woman next to them, especially by spreading their legs. In addition, being exposed to a physical contact like that is one of the most unpleasant things.

WHAT IF...?

What if I don't have to make unintentional eye contact?

What if I don't have to make unintentional physical contact?

What if it is not left to the initiative of men to sit without spreading their legs?

What if my personal space is more defined?

“

+ I think a transparent screen can be put between two things. (seats)

- Where will this transparent screen be?

+ There are those double seats, quadruple seats... if there are two people who know each other, that screen can go down...

... for example, the woman does something like this, puts her bag in between, but (he) still tries to move close to her, tries to narrow the space a little more, and then a fight breaks out.

For example, I go to the window side, he comes, I go further and he comes. ... You keep silent for once, for twice, you shout out for the third time. That's why it's more comfortable when you sit alone. I think the best is the single seat.

”

** Quotes from "Gendered Commutes in Ankara: Women's Experiences, Strategies and Implications for the Design of Public Transport" Project*



Deconstructing the structure to transform or neutralize problematic elements

MANSREADING

The movement "*Grab your legs, don't occupy my place*", which first emerged as an action idea by Istanbul Feminist Collective in 2014 and turned into a campaign with the public interest in a short time, went beyond the borders of our country and attracted attention in Europe and America, and was shared with the public by some city councils there.

But unfortunately, the subject remained as a social media campaign in our country, and even images of men sitting with their legs apart were used thoughtlessly on a poster in a public institution such as the Palace of Justice.



Activists Elena Buscaino and Mina Bonakdar are on a mission to stamp out manspreading on Berlin trains. (AFP)



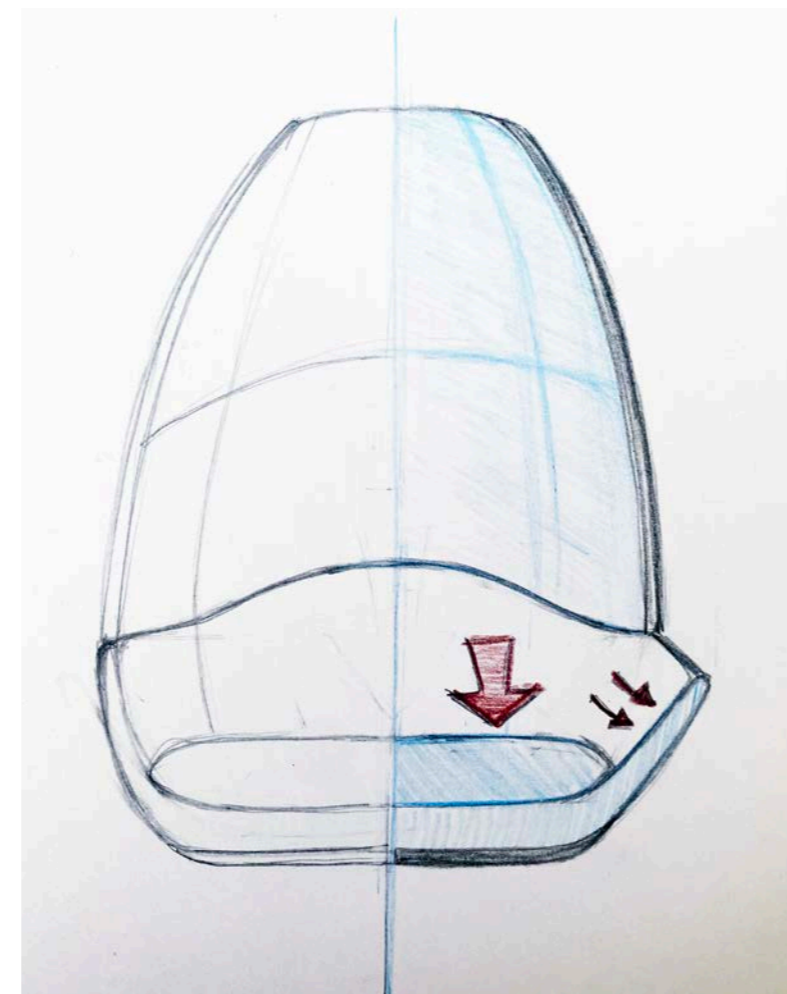
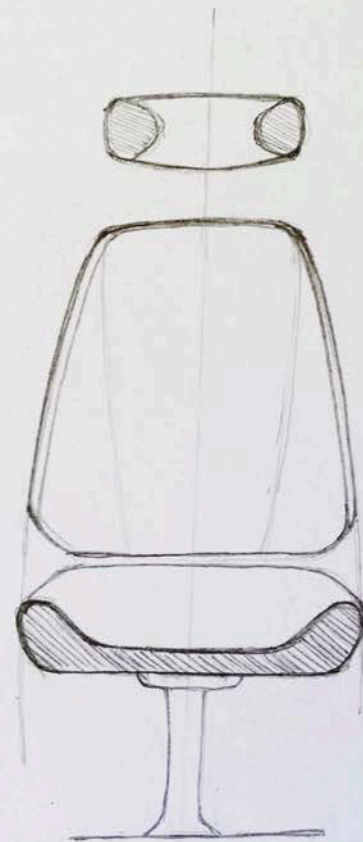
Reconstructing the structure to create a new and safe reality for women

Gather Together

It should not be left to the initiative of men not to sit with their legs apart. The invasion of personal space, and harassment that may result from this situation should be prevented.

Gather Together prevents the user, who tries to sit by spreading his legs, thanks to the barriers on the sitting unit. While it provides space to support sitting ergonomics up to a certain level, it does not allow the other person's space to be invaded.

However, for users with large bodies, the barriers placed on the sides can completely stretch when the whole body weight is left on the sitting unit, enabling these users to sit as proper as possible.





Deconstructing the structure to transform or neutralize problematic elements

2. Undefined Areas

The obligation to use the handles and some undefined areas at certain points of the vehicle makes uncomfortable contacts possible. Since this situation sometimes arises due to circumstances, it also leaves the woman undecided about the idea of harassment. For this reason, women generally remain silent, but they cannot get rid of the stress created by this situation.

They prefer to be standing and, if possible, at the same eye level. Especially a man standing by and standing very close to her creates an unsettling feeling of being trapped.

01

I don't like sitting, and as I said, my **backpack** is always too big. If I may say that my backpack **protects me** in the back, that is something that **provides distance** for me.

... for example, you **don't take off your backpack**, so you can **keep your distance** when you go into a crowded environment. that's what almost all of us use now as a way of **self-preservation**.

So actually a backpack is something I like on the bus because it **protects my butt**, as if it is a **barrier against possible abuse**.

02

In a way that you can **feel safer**, I don't know, you **stand on the sides**, you try to **close yourself in the corner** and protect yourself there. For example, what I do in the subway is to **stand by the door**, instead of standing in the middle.

... so you take your bag in front of you, **lean on your back**, you **close yourself** anyway, or if there is a **group of friends**, you stand next to them.

WHAT IF...?

What if better support is provided while standing?

What if it were possible to "sit higher"?

What if the passenger holding the handle does not touch the other passenger?

What if the handles move away from the seat edges?

* Quotes from "Gendered Commutes in Ankara: Women's Experiences, Strategies and Implications for the Design of Public Transport" Project

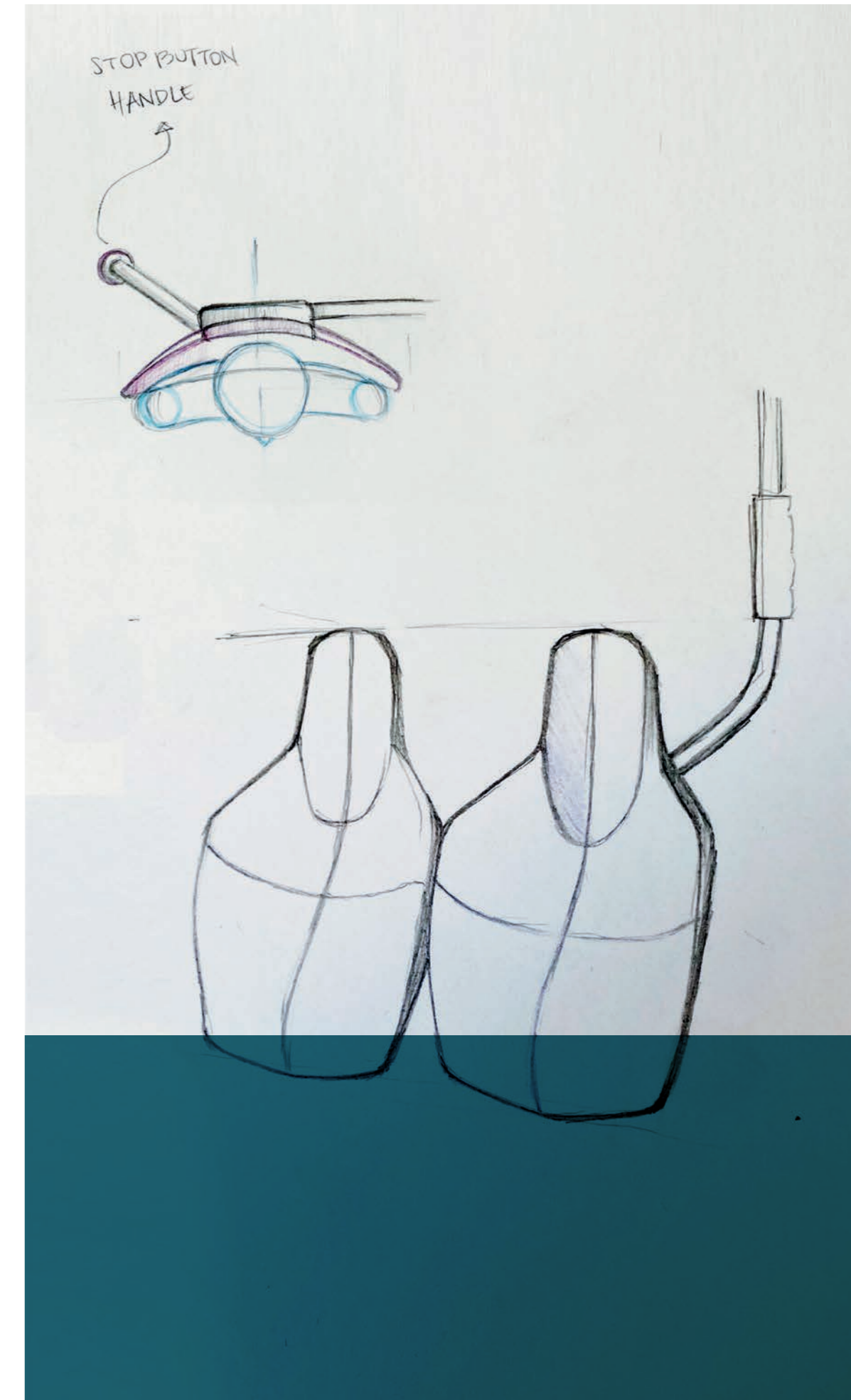
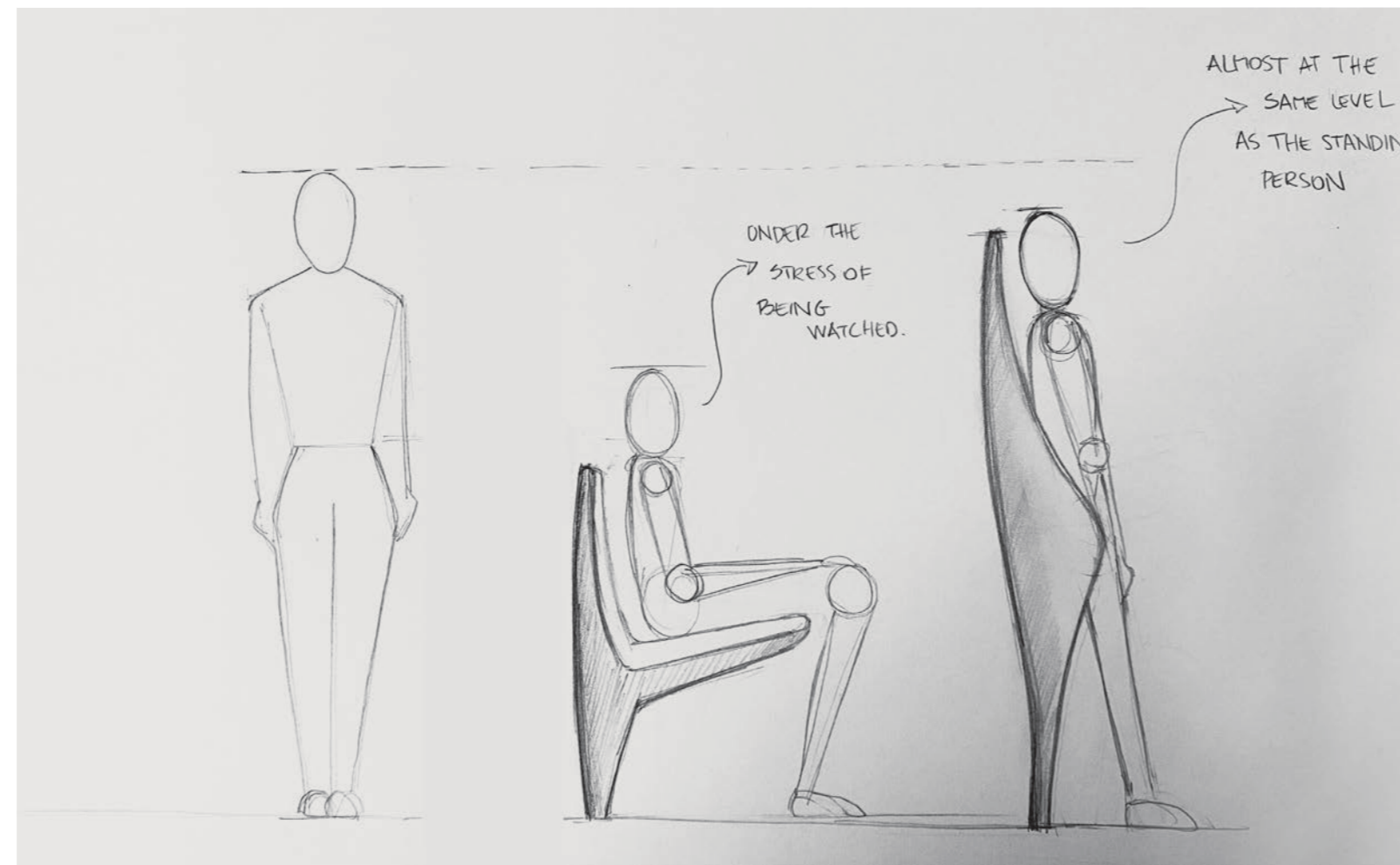


Reconstructing the structure to create a new and safe reality for women

Lean

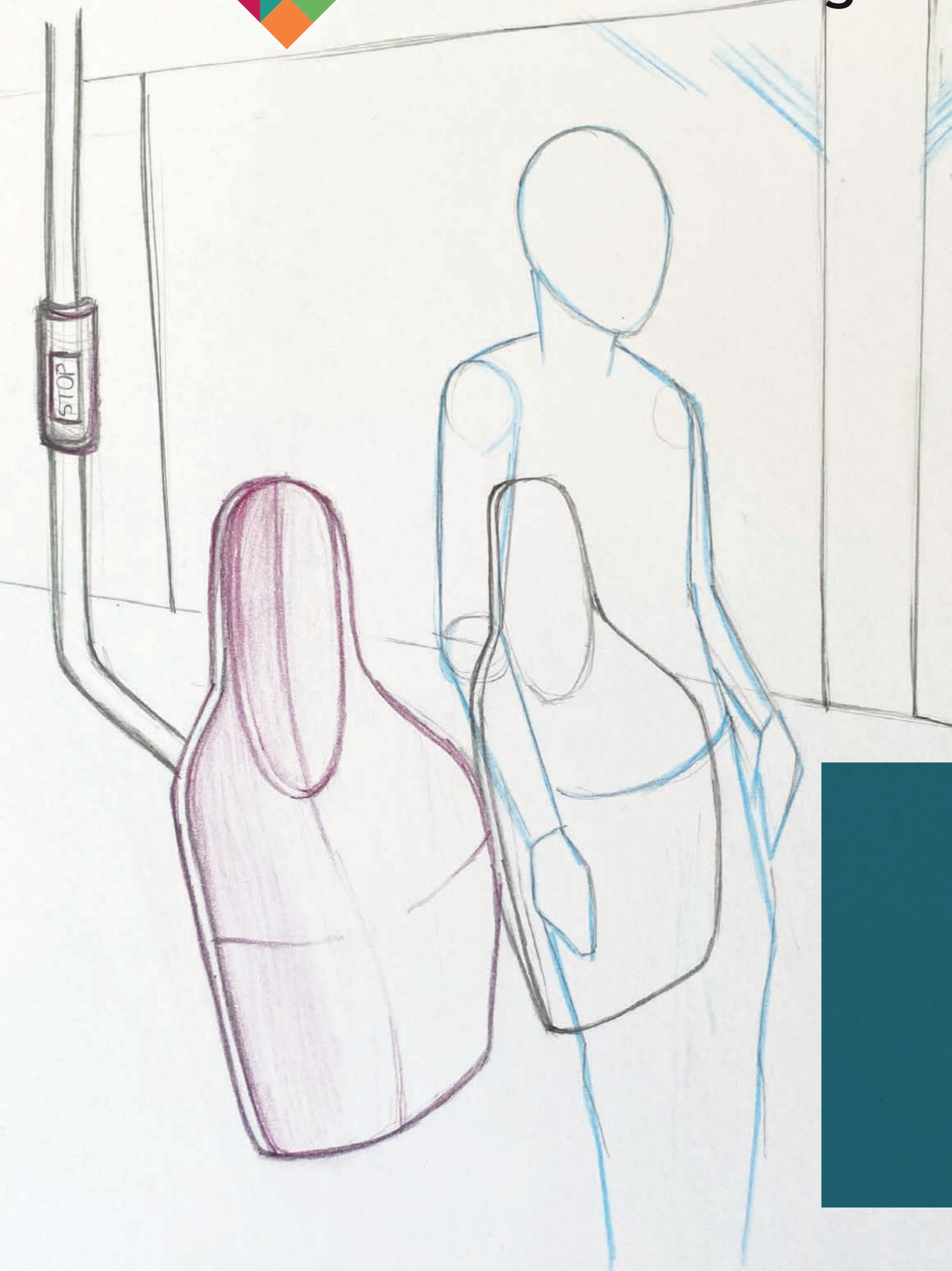
Lean is a transportation unit designed around women's shared insights into some of the key issues they face while using public transportation. Many women complain of having to make eye contact with strangers on public transport. Because this forced contact is sometimes met with only irritating glances, and sometimes it results in more serious harassment.

Another problem mentioned is that if they sit on the corridor side, they feel under the surveillance of the man standing next to them and from time to time they are exposed to physical contact in this situation. They think that their position is more uncomfortable because they are sitting. They say that they need to stand in order to prevent this, and in this case, they need to lean somewhere to feel safer.





Reconstructing the structure to create a new and safe reality for women



Lean

Each unit of the dual module, which is mounted on the wall perpendicular to the corridor, slightly encircles the user with the angle made by its edges. Thus, if she does not want to, she can partially turn her body and restrict her communication with any person next to her.

Since the grip extending from the unit in the corridor to the ceiling is at an angle to the module and is located at a certain distance, it becomes more difficult or more obvious for the person using the handle to keep the person using this module under surveillance.

It is suggested that the modules should be placed on one side of the bus as double and on the other side as single modules.

“By addressing the comments and complaints, Lean provides a defined area where the users can feel safe by leaning on their seating units ergonomically.”



Deconstructing the structure to transform or neutralize problematic elements

3. Mobile Technologies

There is a widespread use of mobile technology and social networks among women. When they are out at a late hour or in an environment where they do not feel safe, and especially when they need to use public transport in rush hours, they share details such as the location, license plate, etc. with their friends or family.

However, they do not think that this will prevent or even deter potential harassment. They also state that it is not enough to feel comfortable only in public transport, and they are also very nervous while waiting at the bus stop or walking on the road.

“

Another thing came to my mind is design-related applications in buses, you know, applications like Vodafone's "red light". in a **risky situation, shares your location**, when you shake the phone. or it turns into a **flashlight, a message is sent** to your friends. maybe there may be a **button on the buses** for such emergencies. I don't remember which country it was, but there are places with **such buttons** in the parks, for example, that **calls the police directly**.

”

“

At the same time, I send a location from the phone, **a live location**, to mention that I am waiting, I send it to whoever is available at that moment. We have a **family group. (Whatsapp)**

”

WHAT IF...?

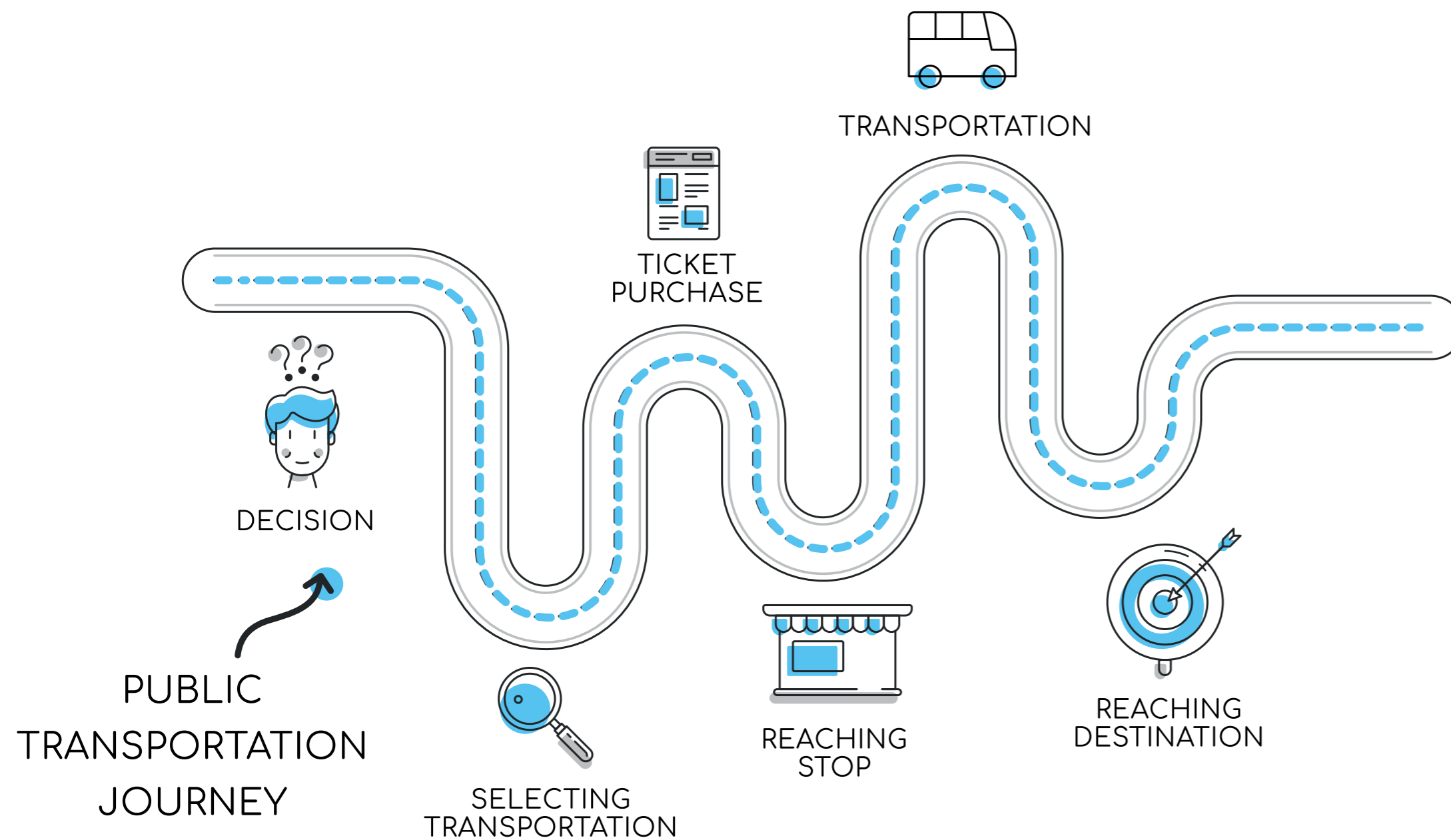
“**What if** there is a product/system that includes all the actors who play a role or are thought to play a role in the process?”

“**What if** it is possible to be safe not only in the vehicle but also in the whole transportation?”



Reconstructing the structure to create a new and safe reality for women

Safe T
Safe Transportation for Women



Covers the whole journey including all attendants and responsible actors (municipality, vehicle personnel, law enforcement, etc.)

SafeT, Safe Transportation for Women aims to make public transportation safer and more userfriendly for women by evaluating all its elements, thanks to the conveniences offered by mobile technology.



Reconstructing the structure to create a new and safe reality for women

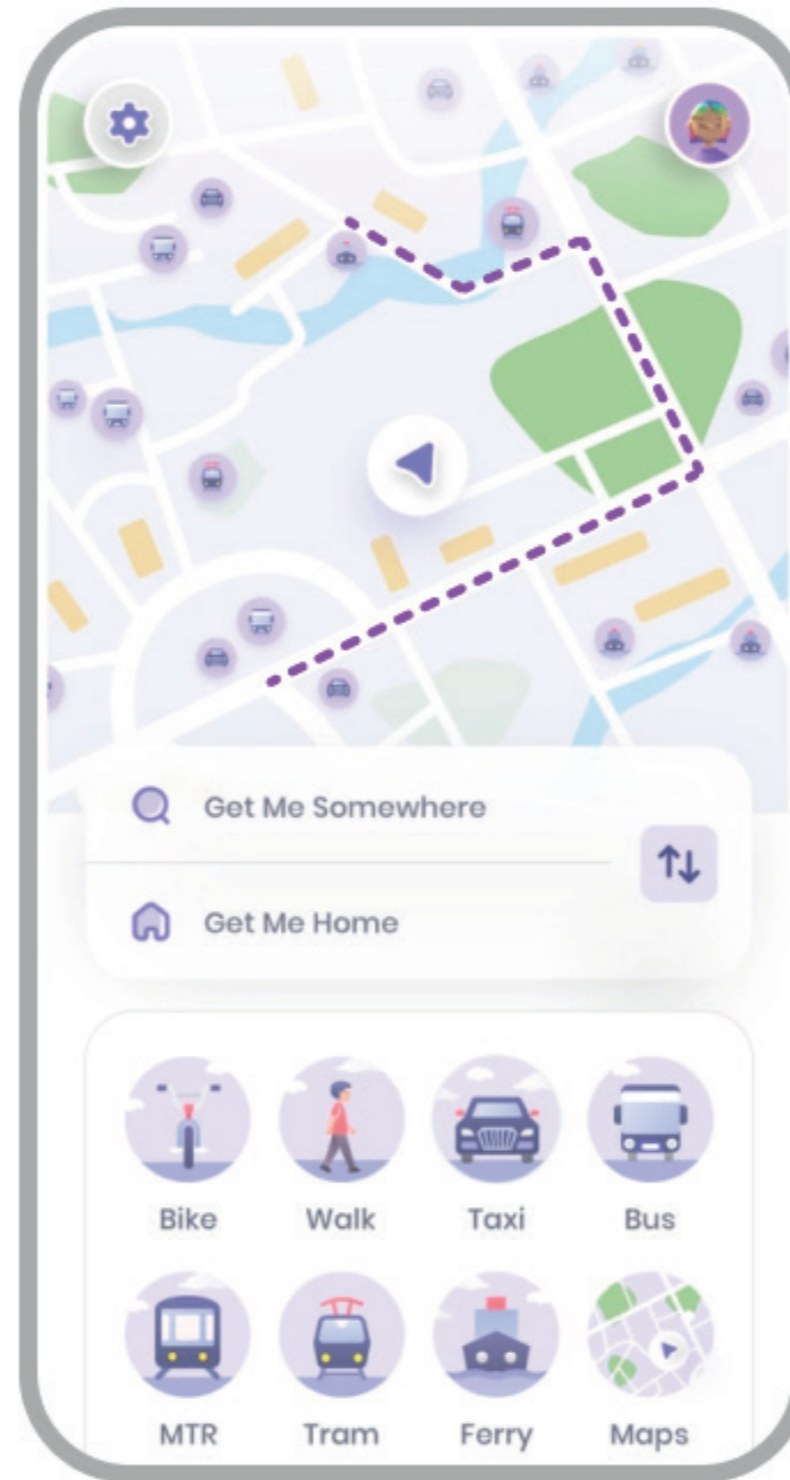
Safe-T App



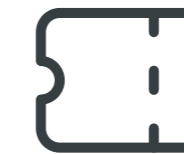
The transportation alternatives are determined by entering the destination. If the user has made certain preferences in the settings, the alternatives are sorted according to these criteria.



The user can see all the options and makes her selection with the help of filters such as time, distance, minimum transfer and vehicle crowd.



If Night mode or Safe mode is selected, recommended safest routes are determined first, and after her selection, she can access the some information like the estimated arrival time or crowdinside the vehicle.



After buying her ticket she is directed to the stop in line with the alternative and user preferences she has chosen.



She can share information such as route, estimated arrival time and instant location with any contact she chooses through the app.



Reconstructing the structure to create a new and safe reality for women

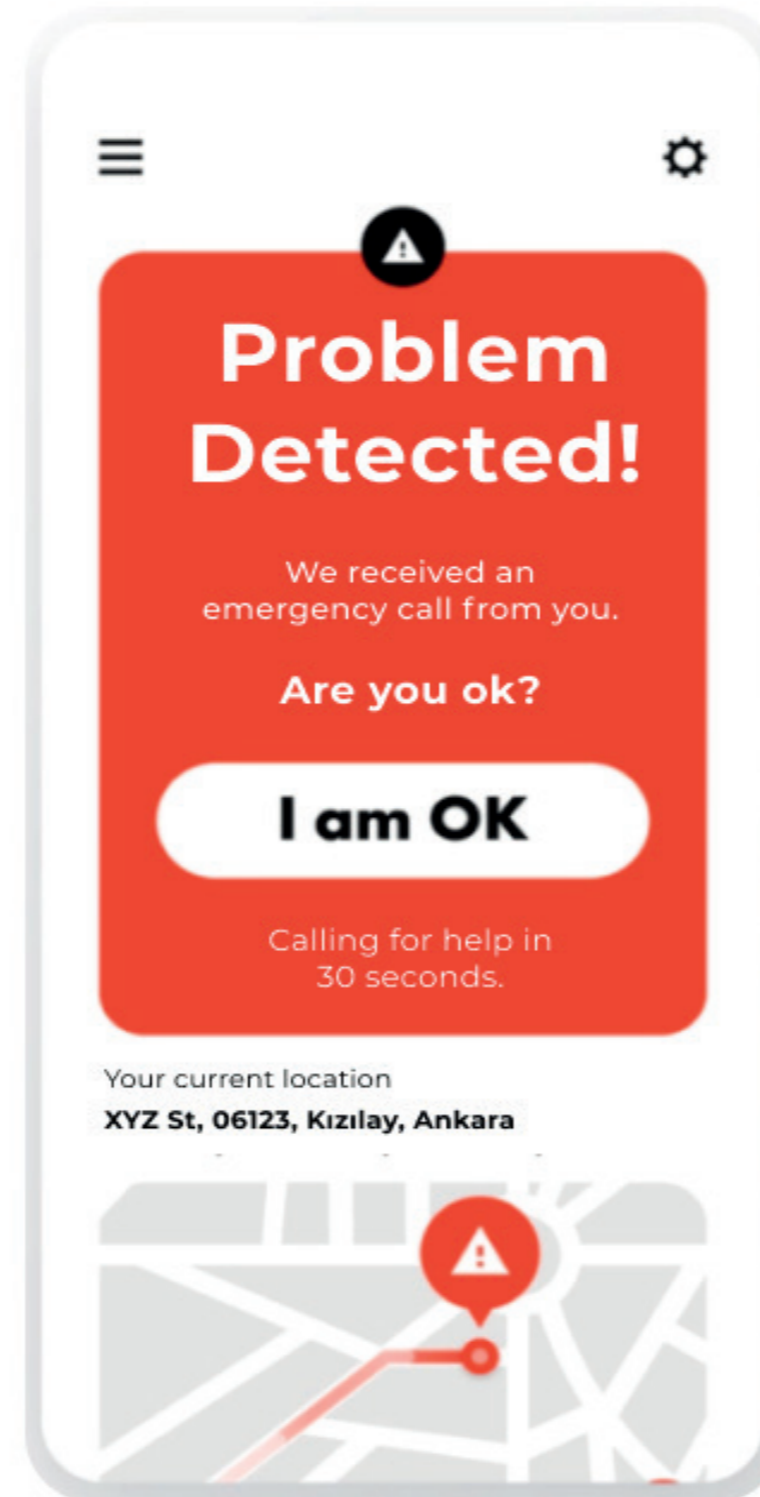
Safe-T App



When she reaches the stop, she can give feedback to the system by grading the road and the safety of the stop via the app, as well as the hygiene, lighting, safety and driver's attitude in the vehicle when she reaches the vehicle.



In case of a problem in the vehicle, the user informs the system and the driver that there is an emergency situation by shaking the phone several times while the application is active on the phone.



As the first authority, the driver is expected to intervene in the situation. The driver notifies the system that is involved in the issue through the application, and if this intervention is sufficient for the complainant, the case is closed based on the feedback.

However, if the driver is not included or if the involvement is not deemed sufficient by the complainant, information is sent to the nearest police department via the system.



THANK YOU

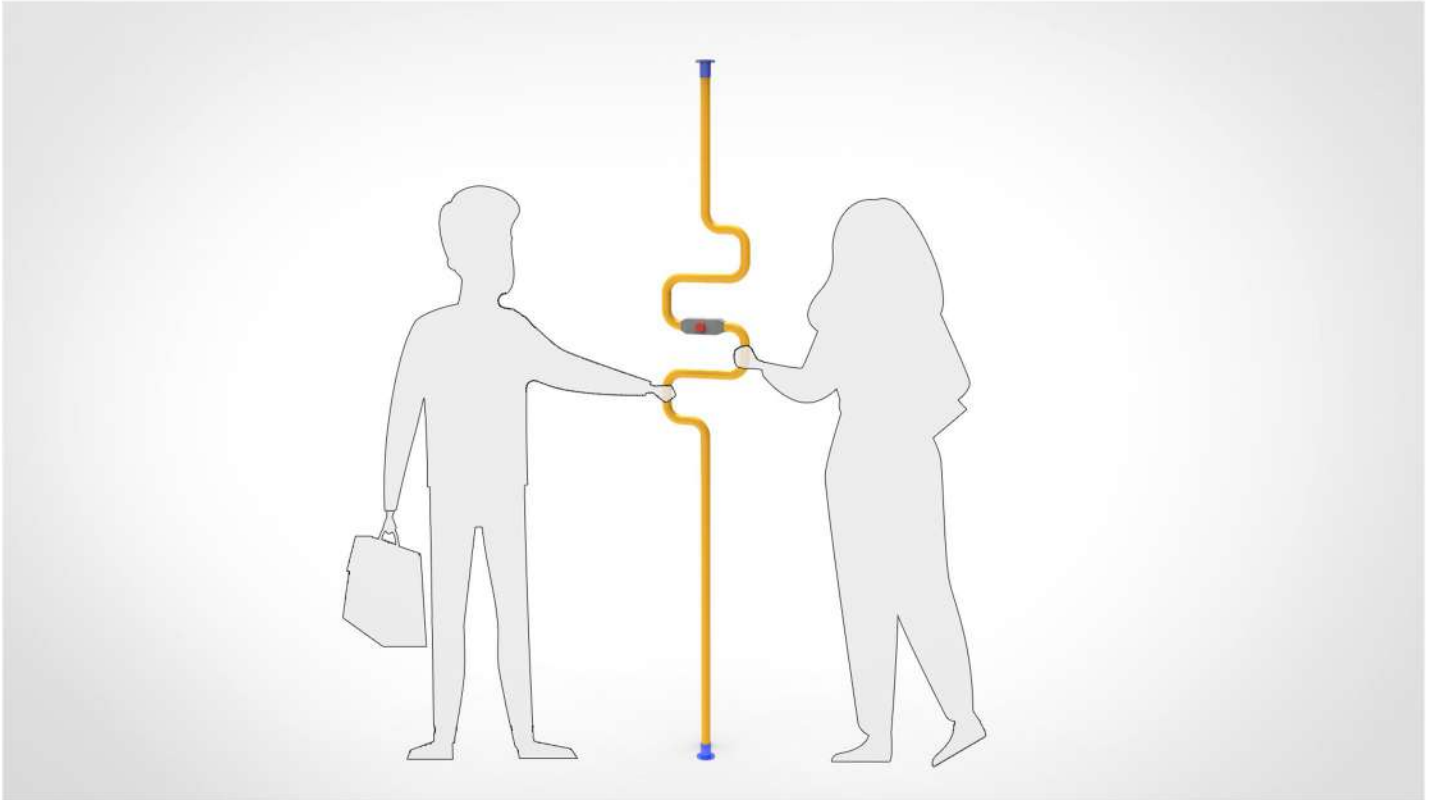
DESIGN PROPOSAL: SAFETY QR CODE



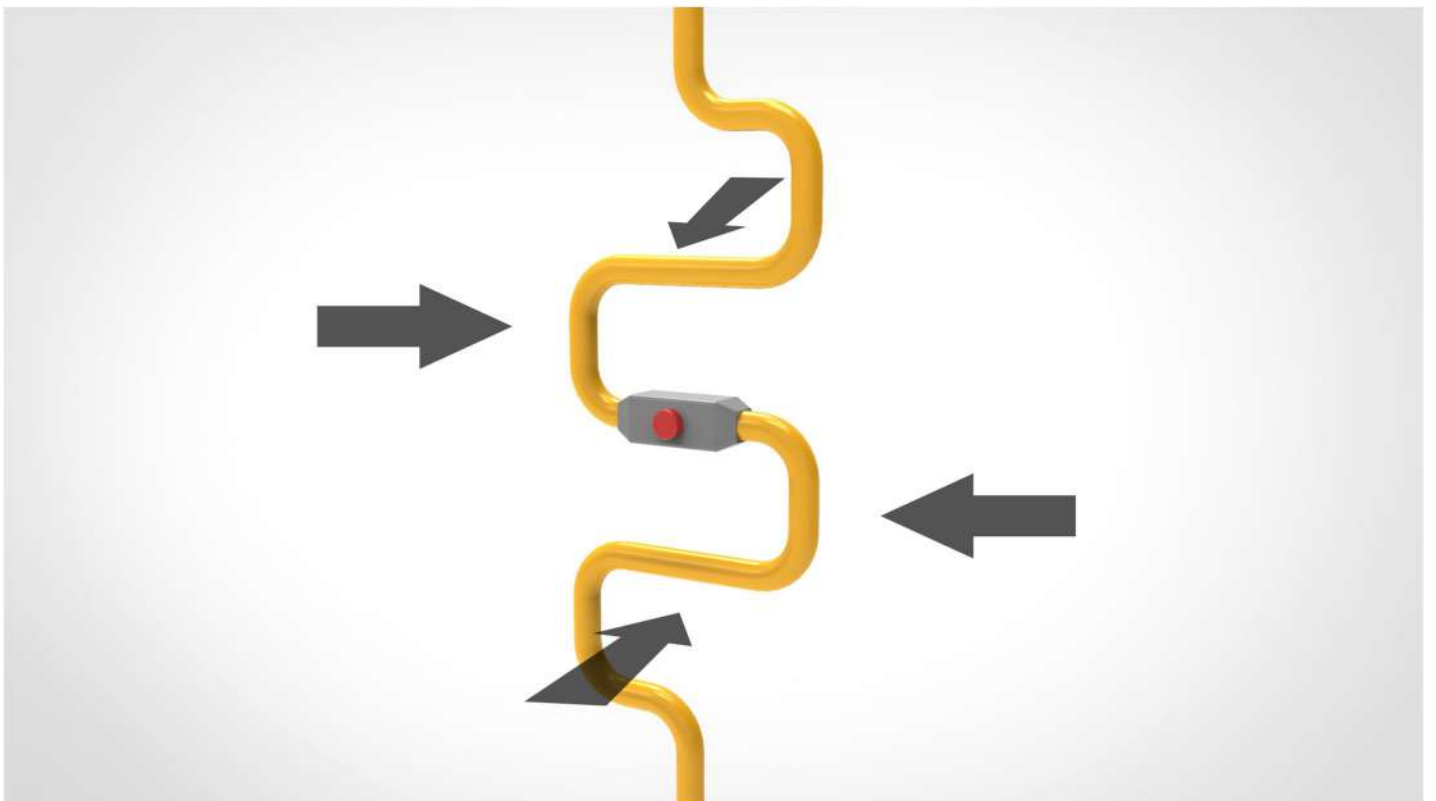
It can be implemented on every vehicle used for public transport on the outside and inside allowing passengers to share information when needed. It should be well integrated with the vehicle's GPS system.



DESIGN PROPOSAL: CURVED HOLDING BARS

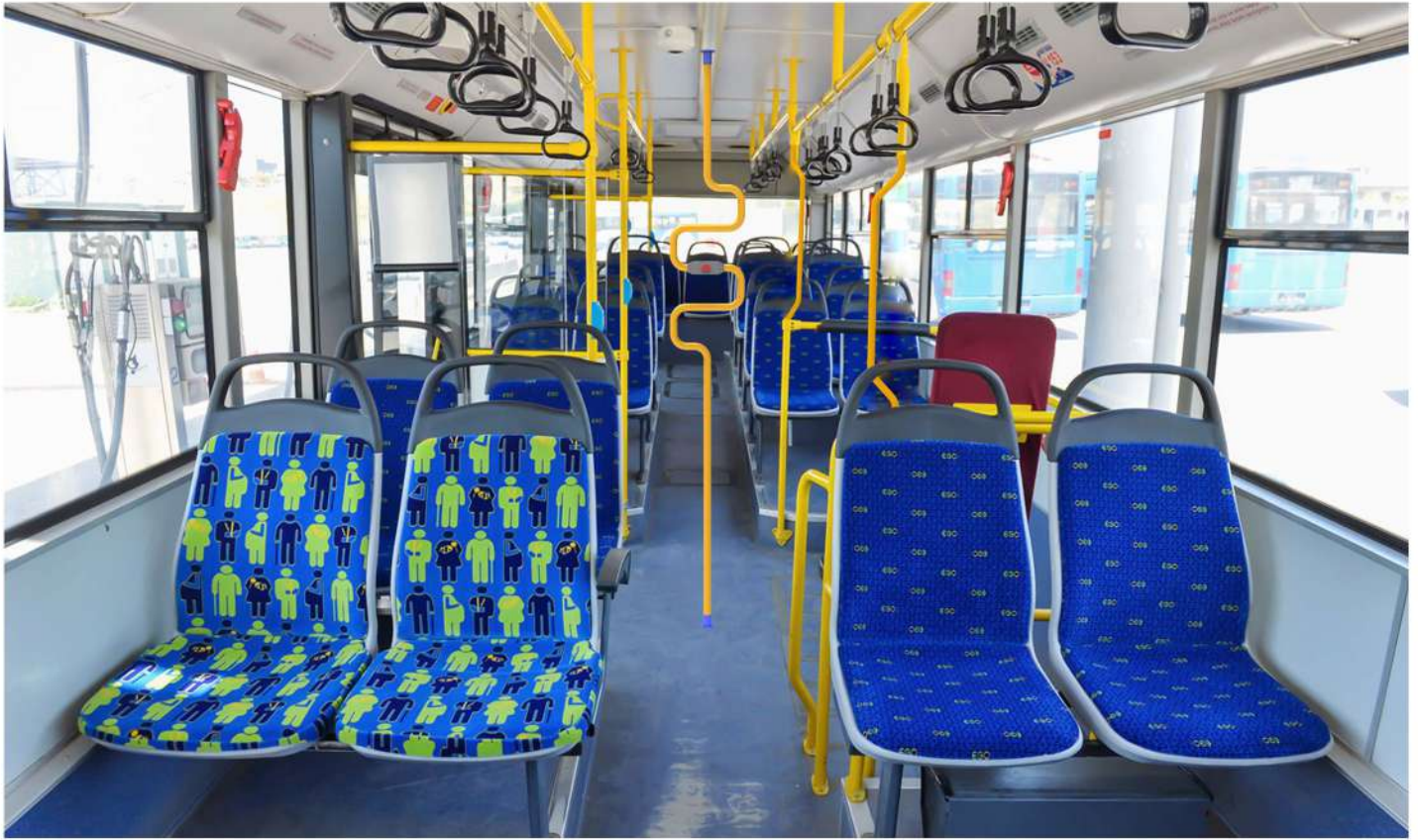


Curved bar body forces passengers to hold onto a designated area for each person and enables access from 4 sides for up to 6 people

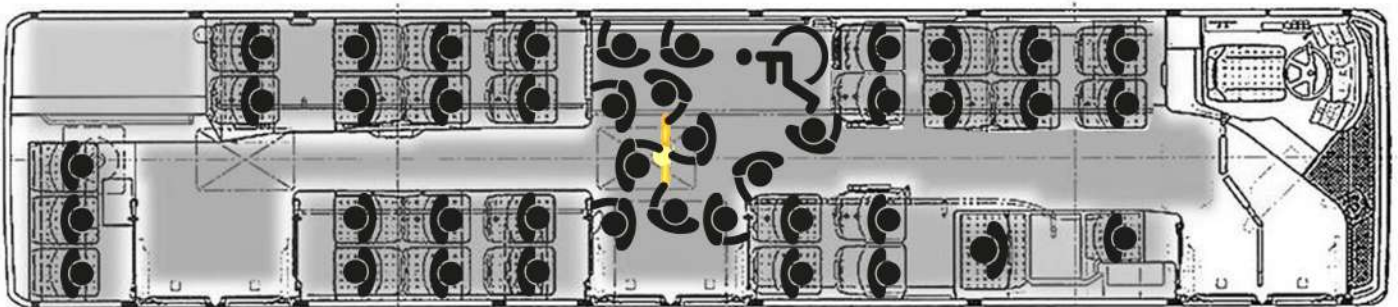


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DESIGN PROPOSAL: CURVED HOLDING BARS



Placed in the standing area forcing people to hold onto different curves of the bar.



This holding position ensures that people turn their back to each other in the standing area.

Also outward bent holding bars are very effective for extending the space between standing and seated passengers.

This feature should be essential for minibusses as well as citybuses.



DESIGN PROPOSAL: RIGID & ROTATING HANDLES

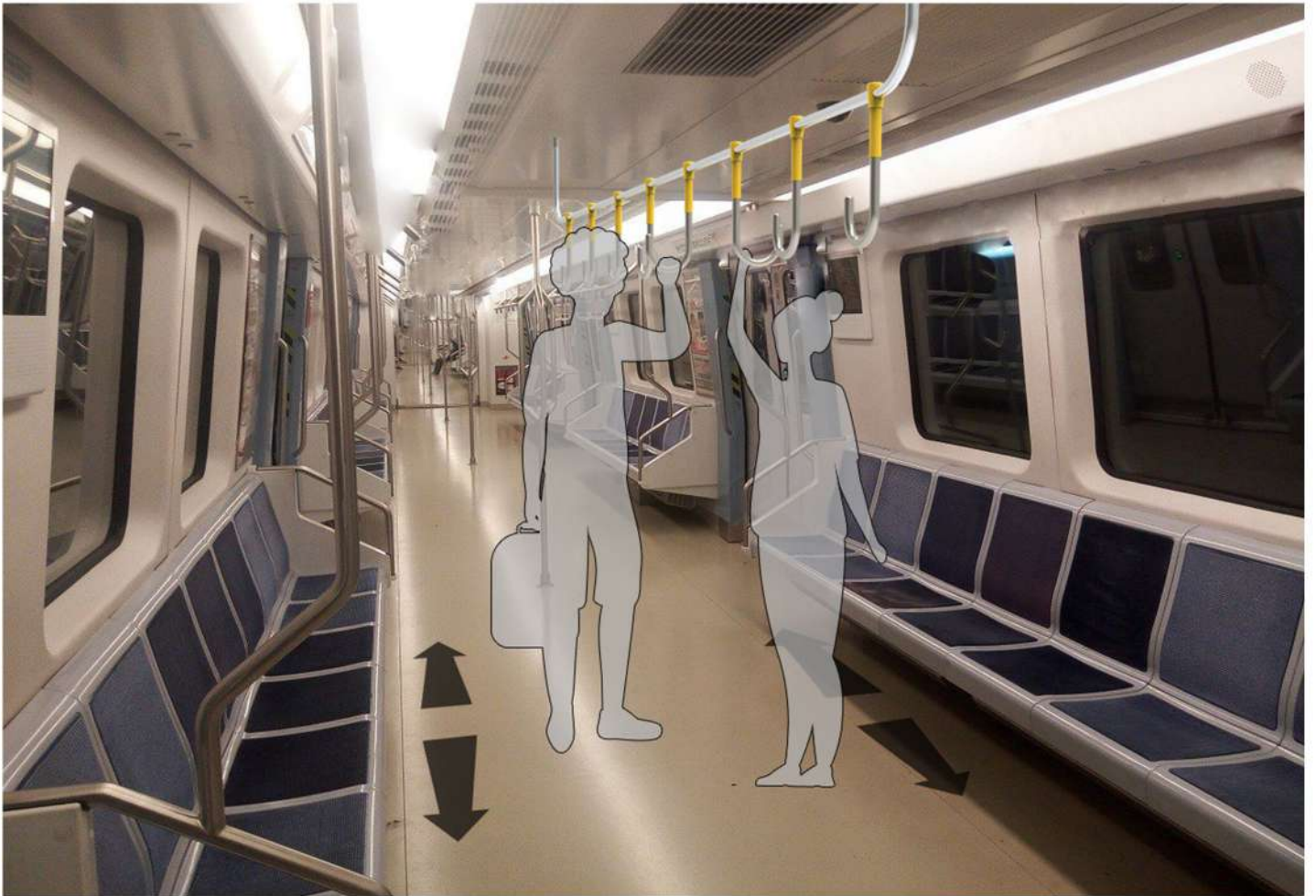


Instead of flexible handles that can swing to every direction, rigid handles that can rotate 360° around a vertical axis, can be a better solution for stability for standing passengers.

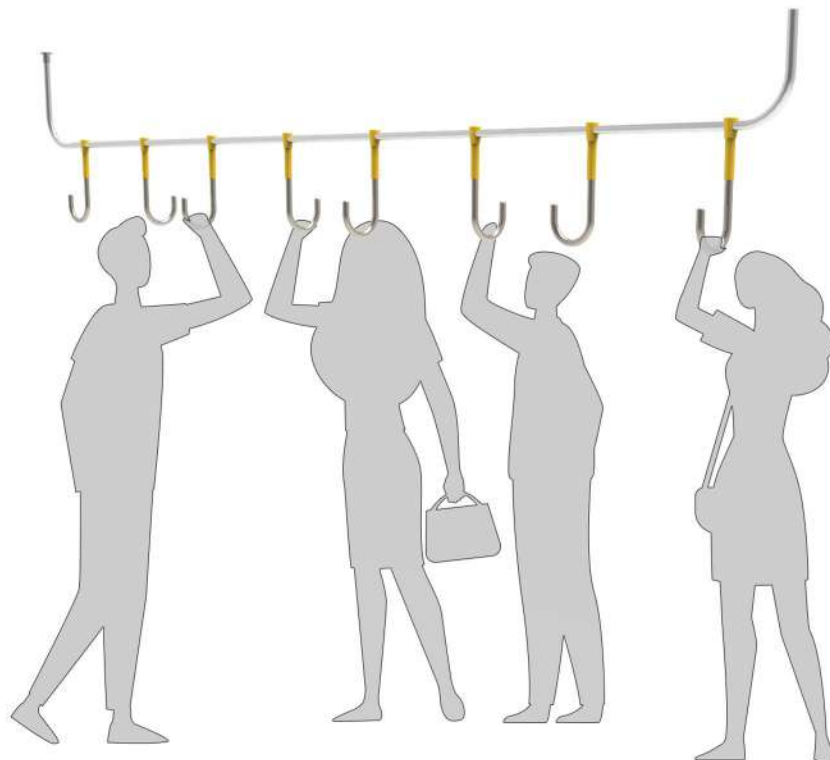


Neutral position of the handle being aligned to the bar, it can rotate to every side to allow passengers choose where to face and be stable at their spot.

DESIGN PROPOSAL: RIGID & ROTATING HANDLES

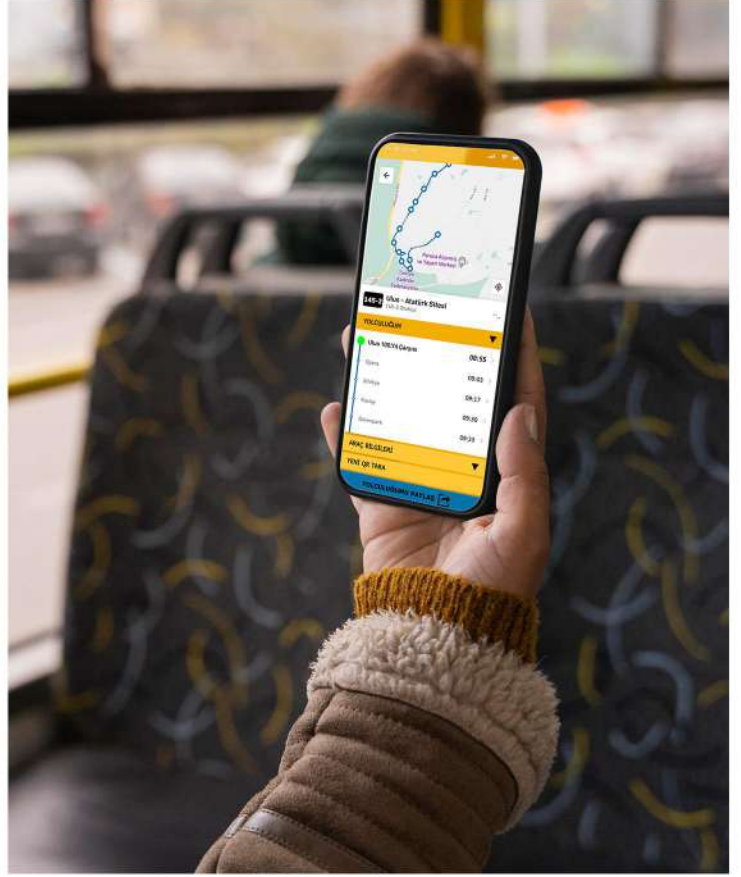


Rigid handles, rotating 360°, placed in the middle of subway wagons can enhance personal space between seated and standing passengers and still ensure an empty pathway for incoming/outgoing passengers.



Gendered Commutes in Ankara: Women's Experiences, Strategies and Implications for the Design of Public Transport

DESIGN PROPOSAL: SAFETY QR CODE



* SAFETY CODE

Scan this QR code to share location and vehicle info of your journey within your trusted circle.



A QR code displaying all information about the vehicle and its route can be viewed and shared with family and friends. It can be integrated with an app for easy use or can direct to a link with all information. It can be placed onto each window next to passenger seats and standing areas for everyone to see.



PUBLIC TRANSPORTATION RIDERS LICENSE

EDUCATED RIDERS, SAFER RIDES

NAME, LAST NAME _____

LICENSE ISSUE DATE DD/MM/YYYY _____

SEXUAL HARASSMENT TRAINING
COMPLETION DATE DD/MM/YYYY _____

4000 1234 5678 9010

IDEA

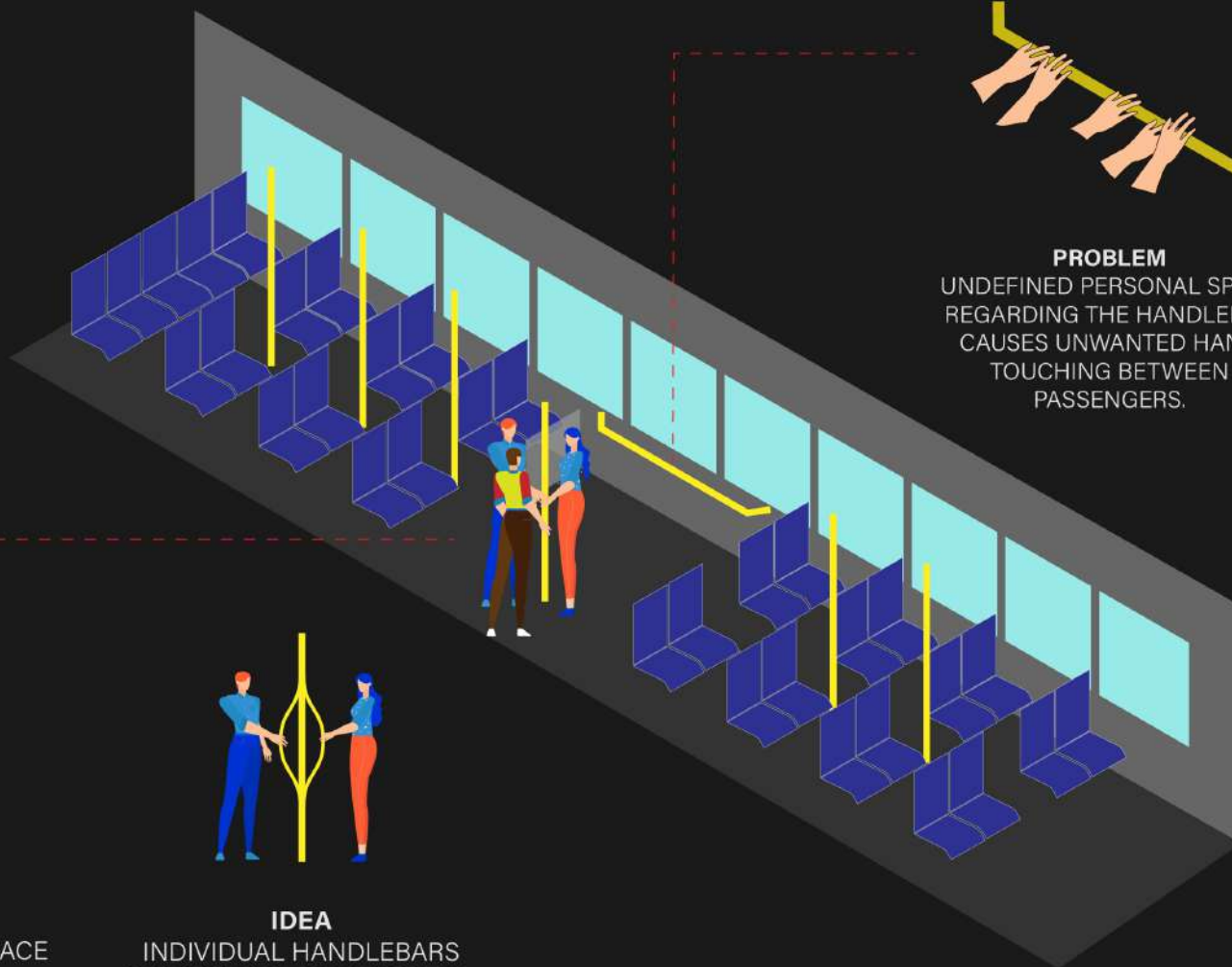
A PUBLIC TRANSPORTATION RIDERS LICENSE PROGRAM THAT REQUIRES EVERY PASSENGER TO TAKE ESSENTIAL TRAINING ON WHAT SEXUAL HARASSMENT IS, AND HOW TO AVOID IT, AND WAYS TO PROVIDE A SAFE RIDE FOR EACH OTHER ON PUBLIC TRANSPORTATION.



PROBLEM
UNDEFINED PERSONAL SPACE
CAUSES UNWANTED
PROXIMITY



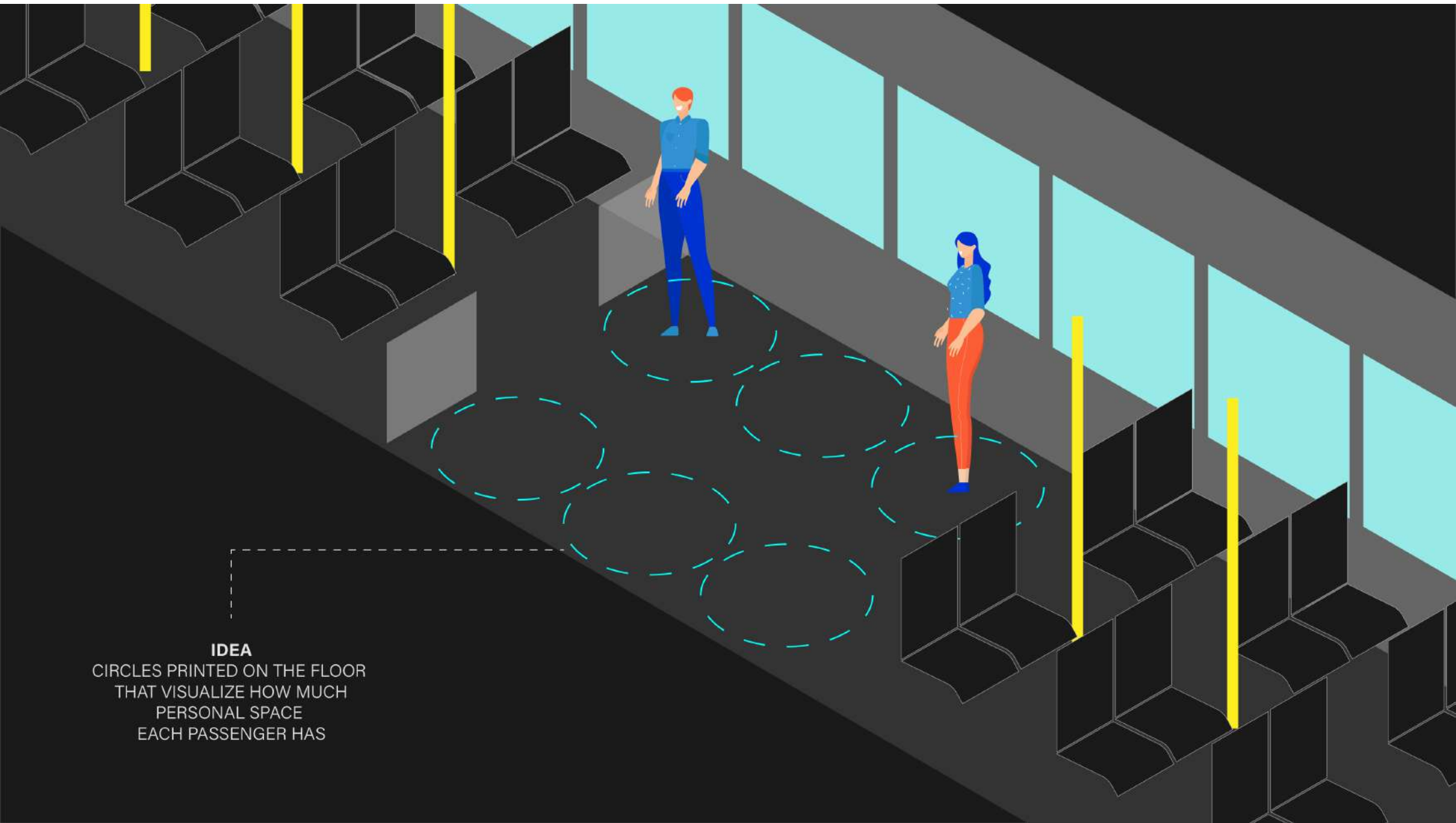
IDEA
INDIVIDUAL HANDLEBARS
FOR MULTIPLE PASSENGERS



PROBLEM
UNDEFINED PERSONAL SPACE
REGARDING THE HANDLEBAR
CAUSES UNWANTED HAND
TOUCHING BETWEEN
PASSENGERS.



IDEA
PLACING SEPARATORS TO
DEFINE PERSONAL SPACE ON
THE HANDLEBAR.

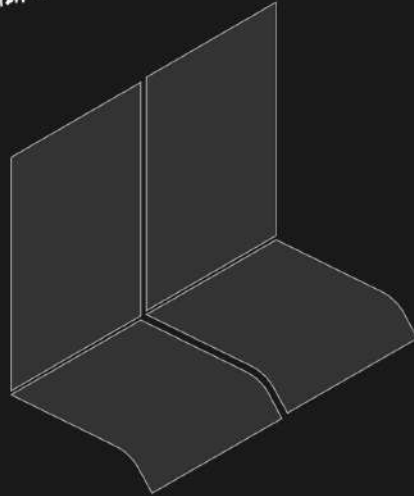


IDEA

CIRCLES PRINTED ON THE FLOOR
THAT VISUALIZE HOW MUCH
PERSONAL SPACE
EACH PASSENGER HAS

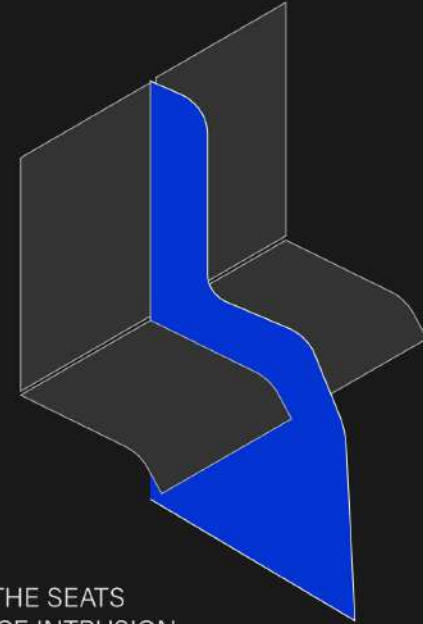
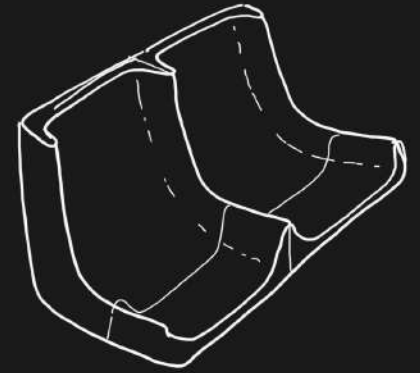
THE
OBLIVIOUS
MAN SPREADER

THE
VICTIM
OF
MANSREADING



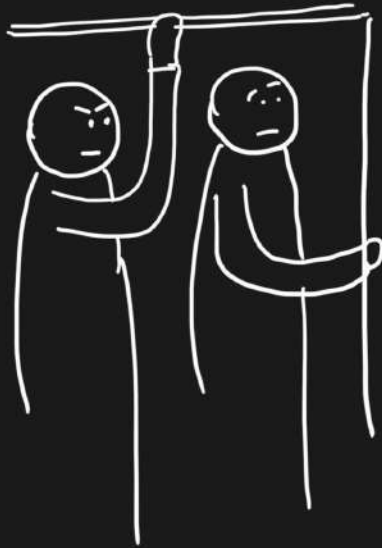
PROBLEM
MANSREADING

TMSS →
"THE MEN SPREADING
STOPPER"



IDEA
A PHYSICAL SEPARATOR BETWEEN THE SEATS
THAT STOPS POTENTIAL PERSONAL SPACE INTRUSION

HOW TO DISTRACT THE PERPETRATOR ?



WHAT WOULD DISTRACT A PERPETRATOR IN TURKEY?

- A FOOTBALL GAME?
- FUNNY VIDEOS?

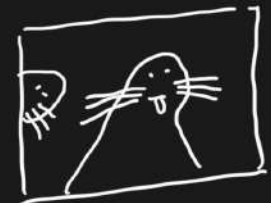
— DISTRACT THEIR ATTENTION —



FOOTBALL GAME VIDEOS



PSYCHEDELIC ANIMATIONS



FUNNY ANIMAL VIDEOS.



PUBLIC TRANSPORTATION RIDERS LICENSE

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